

IN THE CLAIMS

1. (Currently Amended) A semiconductor IC (integrated circuit) chip, ~~A structure for a bond pad used on a semiconductor device~~ A semiconductor IC (integrated circuit) chip, comprising:

a metal line layer;

an interconnect formed through a dielectric layer connecting to the metal line layer;

a bond pad having a first portion disposed over the metal line layer and the interconnect, and a second portion disposed over the dielectric layer and offset from the metal line;

the first portion including a bond area for providing an attachment point for a connection; and

the second portion including a probe area for providing contact with a probe, wherein the bond area is separate from the probe area.

2. (Currently Amended) The semiconductor IC chip structure as recited in claim 1, wherein the metal line layer includes copper.

3. (Currently Amended) The semiconductor IC chip structure as recited in claim 1, wherein the bond pad includes aluminum.

4. (Currently Amended) The semiconductor IC chip structure as recited in claim 1, further comprising a barrier layer disposed between the interconnect and the metal line layer to prevent diffusion therebetween.

5. (Currently Amended) The semiconductor IC chip structure as recited in claim 1, wherein the bond pad includes a thickness of less than about 2 microns.

6. (Currently Amended) The semiconductor IC chip structure as recited in claim 1, further comprising a passivation layer formed on at least a portion of the bond pad to protect the bond pad.

7. (Currently Amended) The semiconductor IC chip structure as recited in claim 6, wherein the passivation layer includes a first opening for the bond area and a second opening for the probe area.

8. (Currently Amended) The semiconductor IC chip structure as recited in claim 6, wherein the passivation layer includes an opening shared by the bond area and the probe area.

9. (Currently Amended) The semiconductor IC chip structure as recited in claim 1, wherein the bond pad is permanently connected to a bond wire.

10. (Currently Amended) ~~A structure for a bond pad used on a semiconductor device~~ A semiconductor IC (integrated circuit) chip, comprising:

a metal layer patterned to form at least one metal line;

a dielectric layer formed on the metal layer and patterned to form a via to the at least one metal line;

a barrier layer formed in contact with the at least one metal line layer through the via;

an interconnect formed in the via and connecting to the at least one metal line layer through the barrier layer;

a bond pad having a first portion disposed over the at least one metal line layer and the interconnect, and a second portion disposed over the dielectric layer and offset from the at least one metal line;

the second ~~first~~ portion including a probe area for providing contact with a probe for device testing; and

the first ~~second~~ portion including a bond area for providing an attachment point for a bond wire, wherein the bond area is separate from the probe area.

11. (Currently Amended) The semiconductor IC chip structure as recited in claim 10, wherein the metal layer includes copper.

12. (Currently Amended) The semiconductor IC chip structure as recited in claim 10, wherein the bond pad includes aluminum.

13. (Currently Amended) The semiconductor IC chip structure as recited in claim 10, wherein the barrier layer includes Ta or TaN.

14. (Currently Amended) The semiconductor IC chip structure as recited in claim 10, wherein the bond pad includes a thickness of less than about 2 microns.

15. (Currently Amended) The semiconductor IC chip structure as recited in claim 10, further comprising a passivation layer formed on the bond pad.

16. (Currently Amended) The semiconductor IC chip structure as recited in claim 15, wherein the passivation layer includes a first opening for the bond area and a second opening for the probe area.

17. (Currently Amended) The semiconductor IC chip structure as recited in claim 15, wherein the passivation layer includes an opening shared by the bond area and the probe area.

18. (Currently Amended) ~~A structure for a bond pad used on a semiconductor device~~ A semiconductor IC (integrated circuit) chip, comprising:

a copper layer patterned to form at least one metal line;

a dielectric layer formed on the copper layer and patterned to form a via to the at least one metal line;

a diffusion barrier layer formed in contact with the at least one metal line ~~copper layer~~ through the via;

an aluminum interconnect formed in the via and connecting to the at least one metal line ~~metal layer~~ through the diffusion barrier layer, the diffusion barrier layer for preventing atomic mixing between the at least one metal line ~~copper layer~~ and the aluminum interconnect;

a bond pad integrally formed with the interconnect and having a first portion disposed over the at least one metal line ~~metal layer~~ and the interconnect, and a second portion disposed over the dielectric layer and offset from the at least one metal line;

the ~~second~~ first portion including a probe area for providing contact with a probe for ~~testing the semiconductor IC chip device testing such that probing the probe area eliminates the~~
~~capability for damage to the diffusion barrier layer and the second portion; and~~

the first ~~second~~ portion including a bond area for providing an attachment point for a bond wire, wherein the bond area is separate from the probe area.

19. (Currently Amended) The semiconductor IC chip structure as recited in claim 18, wherein the barrier layer includes Ta or TaN.

20. (Currently Amended) The semiconductor IC chip structure as recited in claim 18, wherein the bond pad includes a thickness of less than about 2 microns.

21. (Currently Amended) The semiconductor IC chip structure as recited in claim 18, further comprising a passivation layer formed on the bond pad.

22. (Currently Amended) The semiconductor IC chip structure as recited in claim 21, wherein the passivation layer includes a first opening for the bond area and a second opening for the probe area.

23. (Currently Amended) The semiconductor IC chip structure as recited in claim 21, wherein the passivation layer includes an opening shared by the bond area and the probe area.